Preface

This guide is intended for anyone who wants to upgrade or troubleshoot a Dell PowerEdge 1550 or Dell PowerApp 120 system. Before calling Dell for technical assistance, follow the recommended procedure(s) in this guide to solve most hardware and software problems yourself.

- Chapter 1, “Introduction” — Overview of the system's service features.
- Chapter 2, “Checking the Basics”— Initial checks and procedures used to solve basic system problems and information on more detailed troubleshooting procedures to solve more complex problems.
- Chapter 3, “Messages and Codes” — System messages, system beep codes, warning messages, diagnostics messages, alert log messages, and small computer system interface (SCSI) hard-disk drive indicator codes.
- Chapter 4, “Finding Software Solutions” — Software-related problems or problems after testing the system's hardware.
- Chapter 5, “Running the Dell Diagnostics” — Hardware-related problems.
- Chapter 6, “Checking the Equipment,” and Chapter 7, “Checking Inside the Computer” — Troubleshooting procedures for equipment connected to the input/output (I/O) panel of the system and components inside the system, respectively. “Checking Inside the Computer” also provides information on removing the computer cover.
- Chapter 8, “Installing System Board Options”—Installation or removal of system components, such as memory modules, microprocessors, expansion cards, and SCSI devices.
- Chapter 9, “Installing Hard-Disk Drives” — Installation or removal of hard-disk drives, CD-ROM drive, and diskette drive.
- Chapter 10, “Getting Help” — Help tools Dell provides to assist with system problems and explanations on how and when to call Dell for technical assistance.
- Appendix A, “Jumpers and Connectors” — Jumper settings to change when troubleshooting the system or adding internal options. Figures and tables describing the system board and SCSI backplane board connectors.
- “Abbreviations and Acronyms”— Abbreviations and acronyms used throughout this guide and in other Dell documentation for the system.

Other Documentation You May Need

In addition to this *Installation and Troubleshooting Guide*, you might need the following documentation:

- *Dell PowerEdge 1550 User's Guide*
- *Dell PowerApp 120 User's Guide (on-line only)*

  Each of these books describes system features and technical specifications, installing and configuring SCSI device drivers, and the System Setup program.

You may also have one or more of the following documents.

NOTE: Documentation updates are sometimes included with the system to describe changes to the system or software. Always read these updates before consulting any other documentation because the updates often contain information that supersedes the information in the other documents.

- Operating system documentation is included with the system if you ordered the operating system software from Dell. This documentation describes how to install (if necessary), configure, and use the operating system software.
- Documentation is included with any options you purchase separately from the system. This documentation includes information that you need to configure and install these options in your Dell system.
- The Dell OpenManage software documentation, which describes the features, requirements, installation, and basic operation of this optional server management software.
- Technical information files—sometimes called "readme" files—may be installed on the hard-disk drive to provide last-minute updates about technical changes to the system or advanced technical reference material intended for experienced users or technicians.

Typographical Conventions

The following list defines (where appropriate) and illustrates typographical conventions used as visual cues for specific elements of text throughout this document:

- *Interface components* are window titles, button and icon names, menu names and selections, and other options that appear on the monitor screen or display. They are presented in bold.

  Example: Click **OK**.

- *Keycaps* are labels that appear on the keys on a keyboard. They are enclosed in angle brackets.

  Example: <Enter>

- *Key combinations* are series of keys to be pressed simultaneously (unless otherwise indicated) to perform a single function.

  Example: <Ctrl><Alt><Enter>

- *Commands* presented in lowercase bold are for reference purposes only and are not intended to be typed when referenced.

  Example: "Use the **format** command to . . . ."

  In contrast, commands presented in the Courier New font are part of an instruction and intended to be typed.

  Example: "Type `format a:` to format the diskette in drive A."

- *Filenames* and *directory names* are presented in lowercase bold.

  Examples: **autoexec.bat** and **c:\windows**

- *Syntax lines* consist of a command and all its possible parameters. Commands are presented in lowercase bold; variable parameters (those for which you substitute a value) are presented in lowercase italics; constant parameters are presented in lowercase bold. The brackets indicate items that are optional.

  Example: **del** [*drive***:**] [*path*] *filename* [**/p**]

- *Command lines* consist of a command and may include one or more of the command's possible parameters. Command lines are presented in the Courier New font.

  Example: `del c:\myfile.doc`

- *Screen text* is a message or text that you are instructed to type as part of a command (referred to as a *command line*). Screen text is presented in the Courier New font.

  Example: The following message appears on your screen:

  ```
  No boot device available
  ```

  Example: "Type `md c:\programs` and press <Enter>."

- *Variables* are placeholders for which you substitute a value. They are presented in italics.

  Example: DIMM_*x* (where *x* represents the DIMM socket designation).